Cambridge International Examinations
Cambridge International General Certificate of Secondary Education

CANDIDATE NAME

CENTRE NUMBER | | | | | |

CANDIDATE NUMBER | | | | |

1391603277

GEOGRAPHY **0460/23**

Paper 2 **May/June 2015**

1 hour 30 minutes

Candidates answer on the Question Paper.

Additional Materials: Ruler
Protractor
Plain paper
Calculator

1:50 000 Survey Map Extract is enclosed with this Question Paper.

READ THESE INSTRUCTIONS FIRST

Write your Centre number, candidate number and name in the spaces provided.
Write in dark blue or black pen.
You may use an HB pencil for any diagrams or graphs.
Do not use staples, paper clips, glue or correction fluid.
DO **NOT** WRITE IN ANY BARCODES.

Answer **all** questions.
The Insert contains Photographs A, B and C for Question 2.
The Survey Map Extract and the Insert are **not** required by the Examiner.
Sketch maps and diagrams should be drawn whenever they serve to illustrate an answer.

At the end of the examination, fasten all your work securely together.
The number of marks is given in brackets [ ] at the end of each question or part question.

The syllabus is approved for use in England, Wales and Northern Ireland as a Cambridge International Level 1/Level 2 Certificate.

This document consists of **15** printed pages, **1** blank page and **1** Insert.

CAMBRIDGE International Examinations

1 Study the map extract, which is for Rosenfels, Zimbabwe. The scale is 1:50 000.

(a) Fig. 1 shows some of the features in the north west part of the map extract.

Study Fig. 1 and the map extract and answer the questions below.

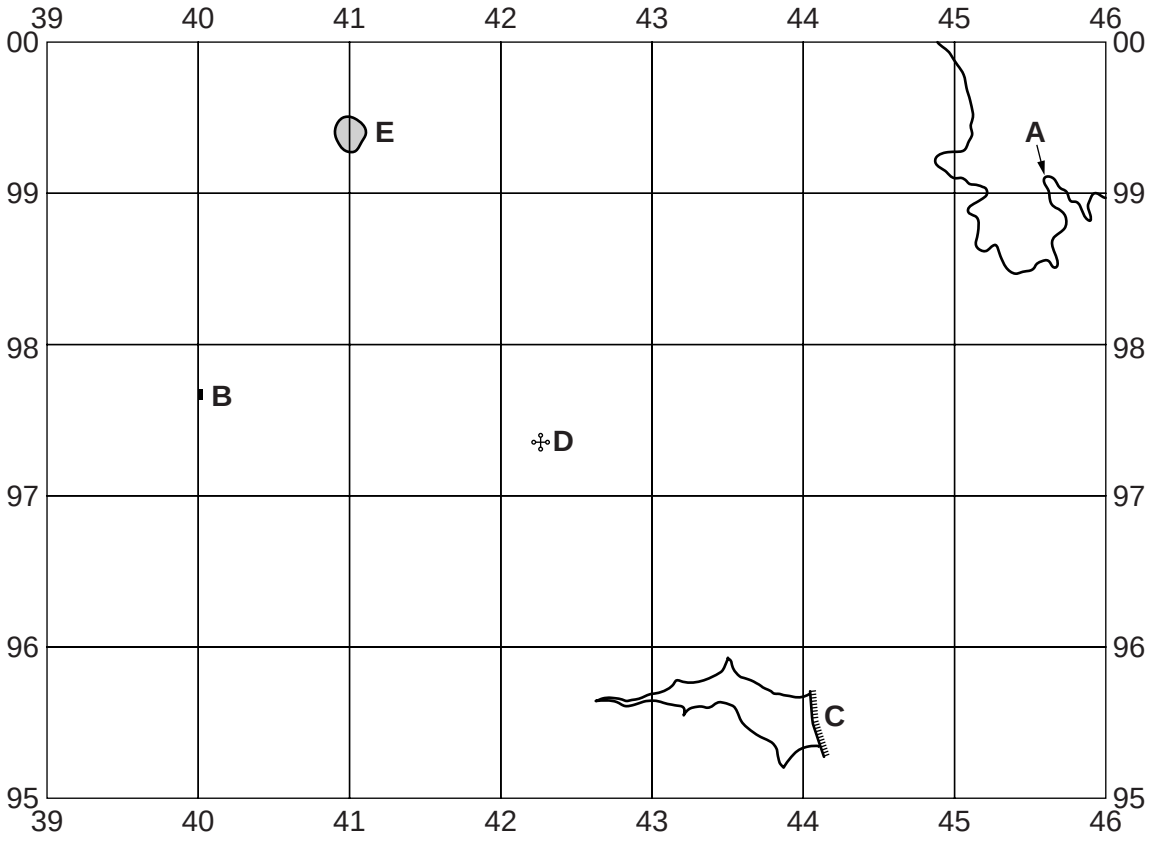

Fig. 1

Using the map extract, identify the following features shown on Fig. 1:

(i) the height of the land shown by feature **A**;

.....[1]

(ii) feature **B**;

.....[1]

(iii) feature **C**;

.....[1]

(iv) the human feature **D**;

.....[1]

(v) the natural feature at the surface of the small hill **E**.

.....[1]

(b) Describe the relief feature named Kezi in the area shown on Fig. 2.

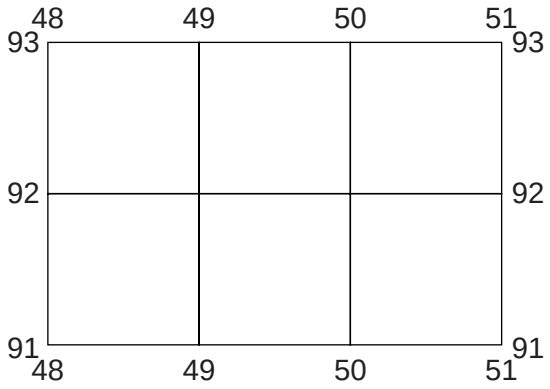

Fig. 2

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.....

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.....

.....

.....[3]

(c) Study the two named rivers in the centre of the area, the Mwewe and the Babuli. The table below compares features of the two rivers. Complete the table by putting ticks (✓) in the correct **four** boxes. Use only **one** tick for each row.

	Mwewe	Babuli	Both of these rivers	Neither of these rivers
Example – meander			✓	
rapids				
islands				
many tributaries				
flows from south east to north west				

[4]

(d) (i) State **one** piece of map evidence that suggests that farming is an important activity in the south and west of the area in the map extract.

.....

.....[1]

(ii) Fig. 3 shows two areas, A and B, in the south of the map extract.

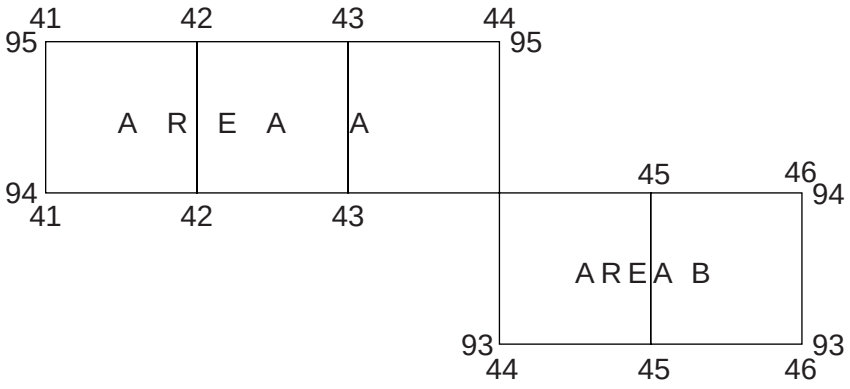

Fig. 3

Study these areas and compare them under the headings in the table below.

	Area A	Area B
services present	…… ……	…… ……
settlement pattern	…… ……	…… ……

[3]

(e) (i) Give the six figure grid reference of the spot height 1032 by the side of the tarred road in the south east of the map extract.

.....[1]

(ii) Measure the distance in metres along the tarred road from the spot height 1032 to the bridge over the Babuli river to the north. Circle the answer below which is nearest to your measurement.

1300 m 1600 m 1900 m 2200 m [1]

(iii) Calculate the gradient along the road between the spot height 1032 and the spot height 1044 that is 850 metres to the north of it.

.....

.....

.....[1]

(iv) State the compass bearing along the cadastral boundary from the spot height 1032 to the eastern edge of the map.

..... degrees [1]

[Total: 20 marks]

2 Photographs A, B and C (Insert) show some features of Salt Lake City in the USA.

(a) Photograph A was taken in the Central Business District (CBD). Give **two** pieces of evidence for this.

1.....

.....

2.....

.....[2]

(b) Using Photographs A, B and C, describe ways in which the city planners have tried to reduce traffic congestion and increase road safety in Salt Lake City.

.....

.....

.....

.....

.....

.....

.....

.....[4]

(c) Describe the relief of the site of Salt Lake City and the relief of the land around it, as shown on Photographs A, B and C.

site .....

.....

land around.....

..... [2]

[Total: 8 marks]

3 Fig. 4 shows earthquakes with magnitude (strength) of 5.0 and above on the Richter Scale that occurred in one week in April 2013.

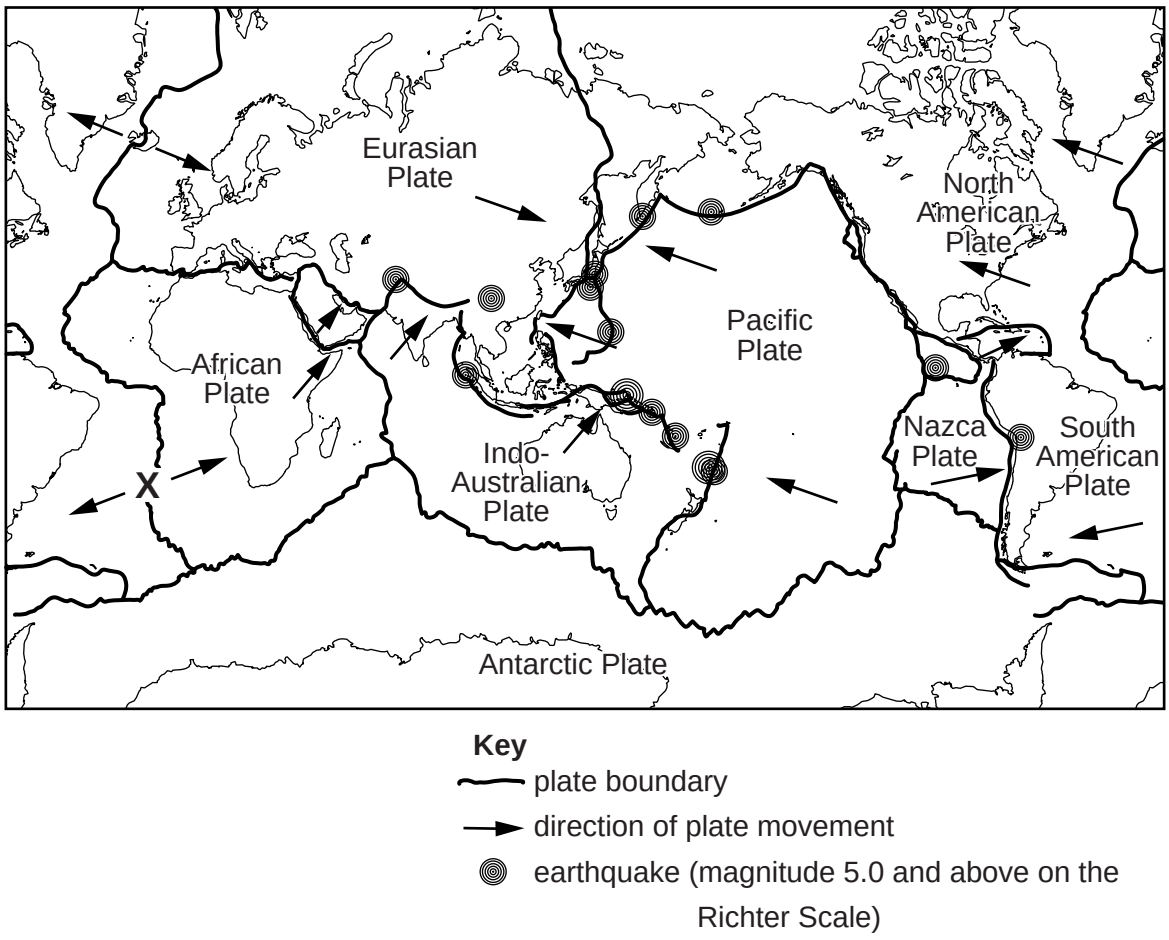

Fig. 4

(a) Name the type of plate boundary at **X**.

..... [1]

(b) With reference to plate boundaries, describe the distribution of the earthquakes shown on Fig. 4.

.....

.....

.....

.....

.....

.....[3]

(c) Fig. 5 shows an area of the South Pacific Ocean, together with information about the deepest earthquake and shallowest earthquake that occurred in the week in April 2013. Fig. 6 is a section through the Earth's crust on which the positions of earthquakes during the week have been plotted.

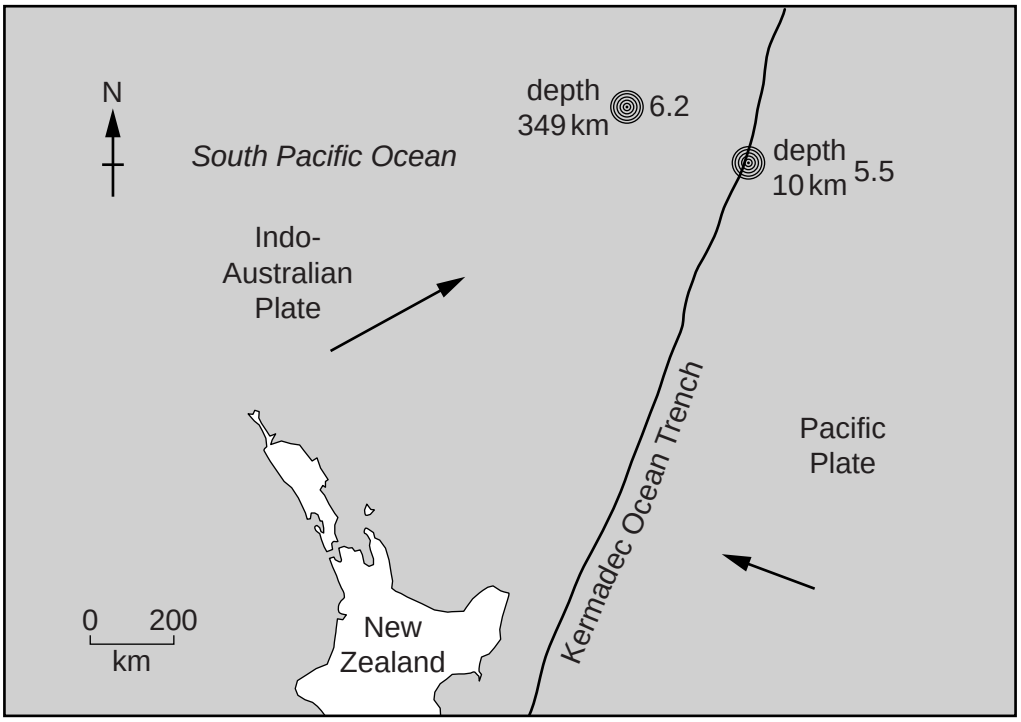

Fig. 5

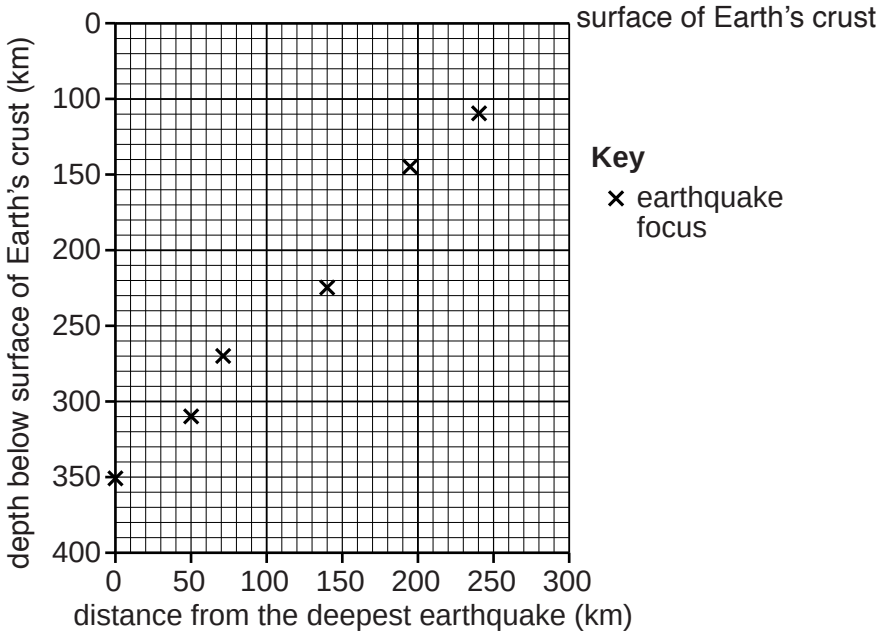

Fig. 6

(i) The shallowest earthquake in the week occurred at a depth of 10 km and was 290 km away from the deepest earthquake. Use this information to plot the position of the shallowest earthquake on Fig. 6. [1]

(ii) Look at Fig. 6. What is the relationship between the depth of the earthquakes and the distance from the line of the Kermadec Trench?

.....

.....[1]

(iii) Use the information on Figs 5 and 6 to name the type of plate boundary shown on Fig. 5.

.....[1]

(iv) Name a process that is occurring along this plate boundary to cause earthquakes at such different depths.

.....[1]

[Total: 8 marks]

4 **(a)** Fig. 7 shows information about the weather for one day in April 2014 at a place in Sri Lanka.

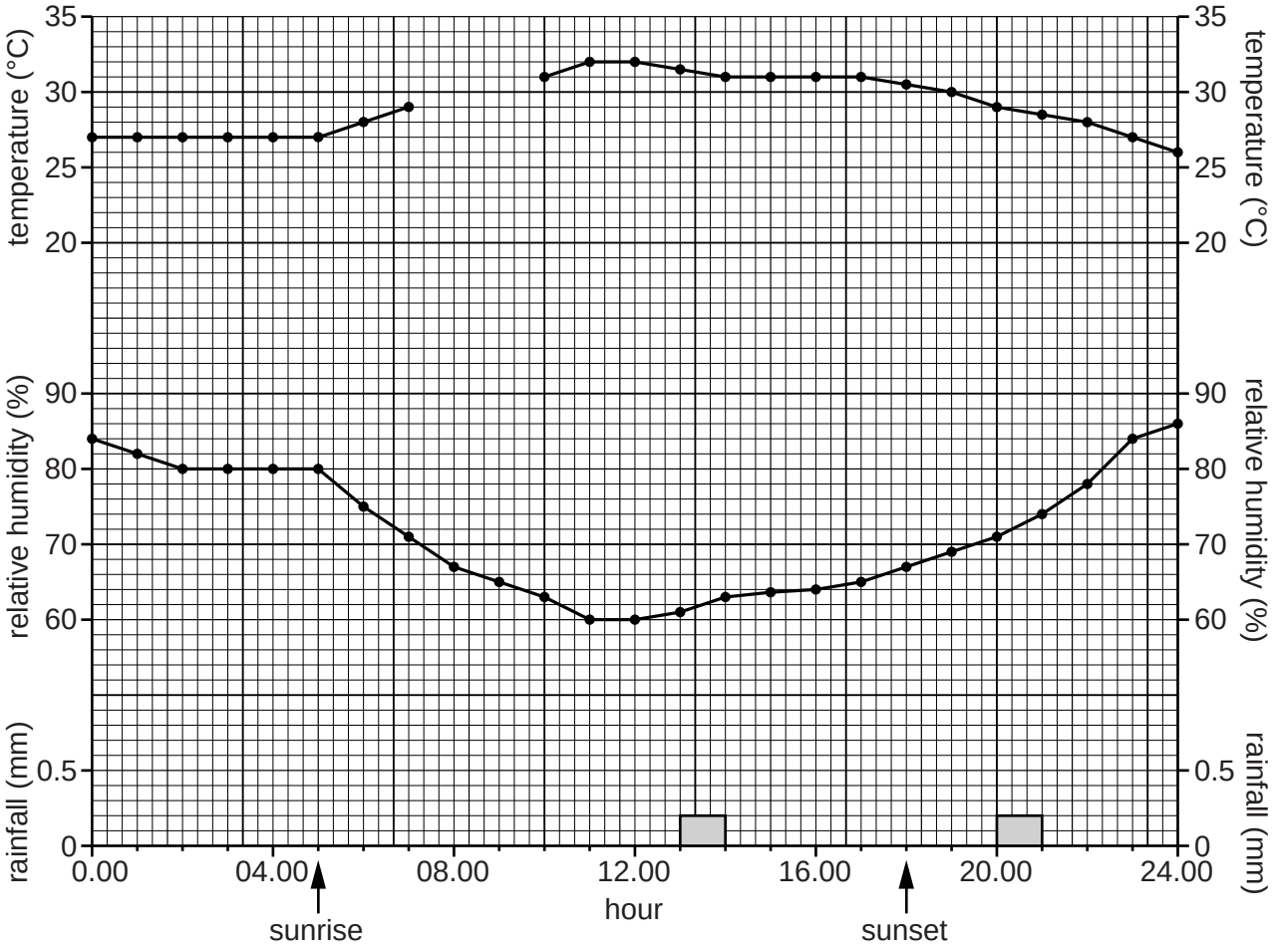

Fig. 7

(i) Use the information in Table 1 to complete the temperature measurement on Fig. 7.

Table 1

Hour	Temperature (°C)
8.00	30
9.00	30.5

[1]

(ii) Draw a bar on Fig. 7 to show that 0.5 mm of rain fell between 12.00 and 13.00 hours. [1]

(iii) Use the information in Fig. 7 to complete the table below in the spaces provided.

	Value	Hour(s)
lowest temperature	26°C	24.00
highest temperature	..... °C	.....
daily temperature range	..... °C	
lowest humidity	60%	between 11.00 and 12.00
highest humidity	..... %	.....

[3]

(iv) Explain the temperature variations shown on Fig. 7.

.....

.....[1]

(v) Use the data in Fig. 7 to complete the following sentence:

As temperature rises, the relative humidity .....[1]

(b) Which of the data on Fig. 7 was obtained using an instrument located outside the Stevenson Screen?

.....[1]

[Total: 8 marks]

5 Study Table 2, which gives information about Ivory Coast, a country in tropical Africa.

Table 2

Region	Rainfall	Soils	Main agriculture
northern half of the country	heavy but unreliable from June to October dry from November to May and droughts occur	light and loose	nomadic pastoralism
southern half of the country	rain in all months	good quality clay	mainly arable

(a) (i) Three slopes in the southern half of the country with different land uses were found to have different rates of soil erosion. The land uses on the three slopes were:

bare soil cultivation pasture

In the spaces provided in the table below, write the land use most likely to result in the rate of erosion shown.

Rate of soil erosion (tonnes per year per hectare)	Land use
90	……
100	……
140	……

[2]

(ii) Explain how trees help to prevent soil erosion.

.....

.....

.....

.....[3]

(b) Use the information in Table 2 to explain why soil erosion is likely to be a serious problem in the northern half of the country.

.....

.....

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.....

.....

.....[3]

[Total: 8 marks]

6 Fig. 8 shows the numbers employed in the shipbuilding industry of Brazil between 2000 and 2011.

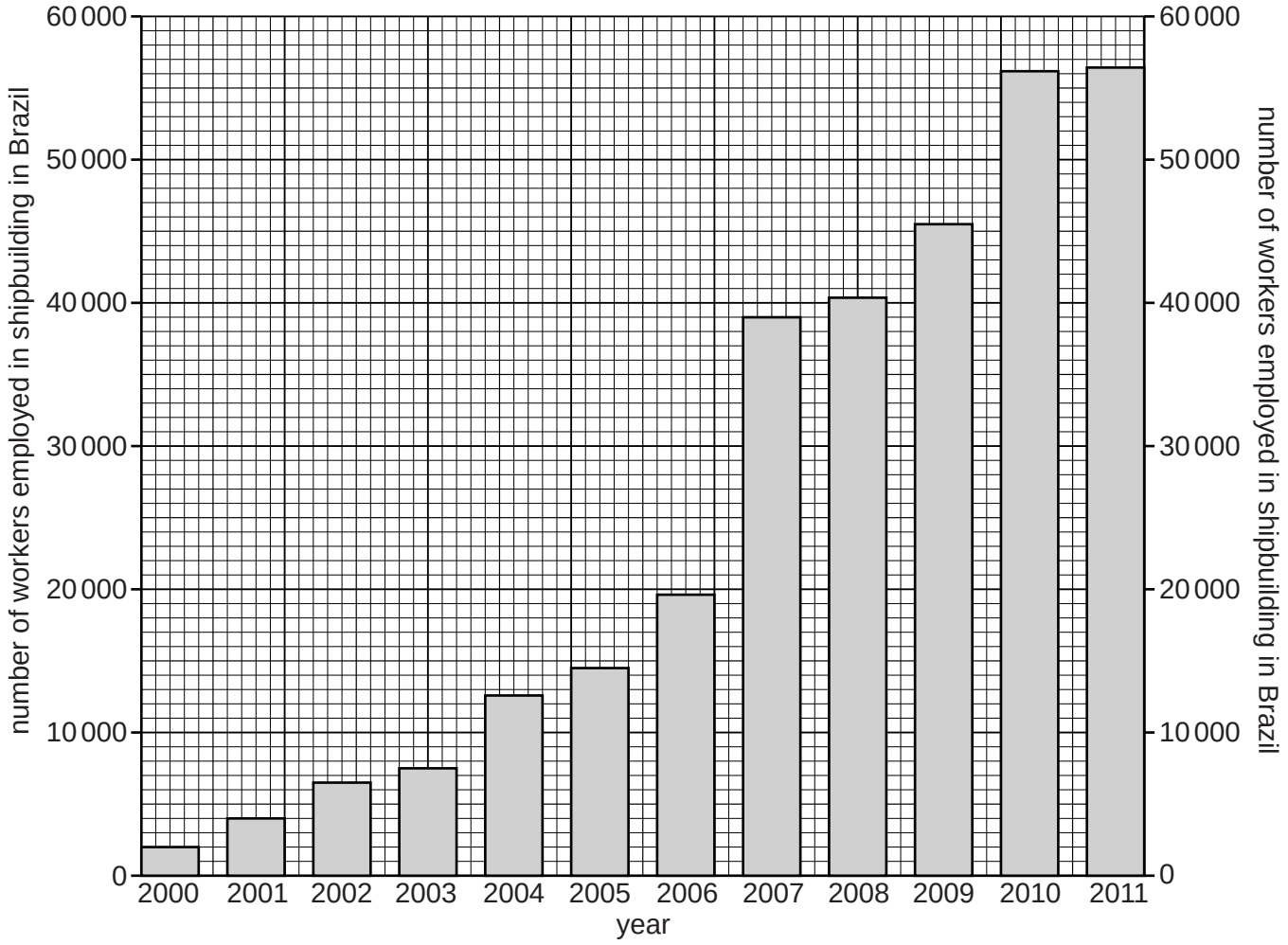

Fig. 8

(a) (i) State the number of workers employed in the shipbuilding industry of Brazil in 2007.

.....[1]

(ii) Using Fig. 8, describe the changes in the numbers employed in shipbuilding in Brazil from 2000 to 2011. Do **not** give a year by year account.

.....

.....

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.....

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.....

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.....[4]

(b) Suggest **one** problem that the Brazilian shipbuilding industry would have faced because of the changes between 2000 and 2011.

.....

.....[1]

(c) Suggest **two** reasons for the changes in the Brazilian shipbuilding industry between 2000 and 2011.

.....

.....

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.....[2]

[Total: 8 marks]

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